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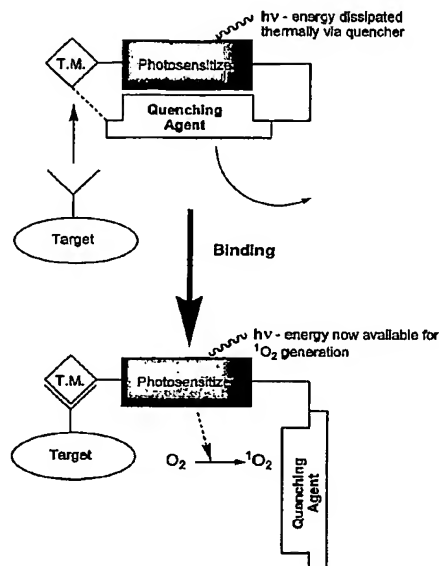
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(54) Title: **SINGLET OXYGEN PHOTOSENSITIZERS ACTIVATED BY TARGET BINDING ENHANCING THE SELECTIVITY OF TARGETED PDT AGENTS**



Binding of the complex of the photosensitizer, quenching agent, and targeting moiety (TM) to the target, displacing the quenching agent (QA) from its position near the photosensitizer and causing the photosensitizer to become available for ¹O₂ generation.

(57) Abstract: Provided herein are conjugates, kits, articles of manufacture and methods for detection, diagnosis and treatment by photodynamic therapy of certain undesired biological substrate targets, including, but not limited to bacteria, viruses, and other pathogenic microorganisms, tumors and hyperproliferative tissue. In particular, the conjugates provided include a fluorophore or photosensitizer linked to a targeting moiety and a quenching agent in such a way that activation of the fluorophore or the photosensitizer is quenched unless the targeting moiety is bound to a target, whereupon the quenching agent dissociates or moves away from the photosensitizer, enabling activation of the photosensitizer upon irradiation with light of a suitable wavelength.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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